Socially Responsible Investing: Data-Driven Decision Making

Magali A. Delmas and Jinghui Lim[1]

UCLA

Abstract

Socially responsible investing (SRI) is an investment process that screens investment opportunities based on ethical, social, corporate governance, or environmental. SRI has been growing rapidly; total U.S.-domiciled SRI-managed assets increased from $3.74 trillion in 2012 to $6.57 trillion in 2014. The growth of SRI puts it in a position to encourage sustainability as such firms have better access to capital markets. Unfortunately, while financial performance indicators have become standardized, social and environmental performance ratings have not. As the prominence of SRI grows, so does the number of metrics available to evaluate corporate social performance: there were 21 ratings in 2000 and that number grew to 108 by 2012.

The complexity of environmental and social performance contributes to the proliferation of rating metrics. Different aspects of environmental performance might be important to different rating schemes. For instance, one rating could place emphasis on greenhouse gas emissions, while another rating could focus on water usage. The heterogeneity of such ratings creates a situation in which the results of an assessment of environmental performance can differ based on which criteria are used. This case examines this phenomenon.

This case examines 13 publicly traded chemical companies in order to understand the various measures and dimensions of corporate environmental performance. Students are presented with real-world data on corporate environmental performance (including pollutants released and third-party corporate social responsibility ratings) and asked to incorporate environmental and social performance into investing decisions. This case highlights the challenges of evaluating corporate environmental performance.

---

[1] Corresponding author: delmas@ucla.edu

Case

Skyler Riley has been a life-long advocate for the environment. She firmly believes that corporations have a critical role to play in sustainability, and that investors should encourage corporations to play that role. Naturally, she is excited to start work at one of California's largest pension funds, California Administration for Public Employee Retirement Savings (CAPERS), which was well known for being at the forefront of socially responsible investing. On her first day of work, she is assigned to examine possible investments in the chemicals industry. Skyler is put in charge of creating an index for thirteen chemical companies on the Standard & Poor's 500 index. Her supervisor hands her data of these companies from 1991 to 2012, gleaned from several sources: MSCI, the EPA, and Compustat.

Background on Socially Responsible Investing

Socially responsible investing (SRI) is an investment process that screens investment opportunities based on ethical, social, corporate governance, or environmental criteria (Renneboog et al., 2008). Total U.S.-domiciled SRI-managed assets increased from $3.74 trillion in 2012 to $6.57 trillion in 2014 (Social Investment Forum, 2014). The growth of SRI puts it in a position to encourage corporate sustainability as such firms have better access to capital markets.

Good environmental performance can be associated with good financial performance for several reasons. First, reducing the amount of inputs can improve both environmental friendliness and financial performance. Second, reducing waste can reduce waste management cost and regulatory fines and costs associated with future regulation. Third, developing a reputation as a responsible organization can gain the firm support among stakeholders. However, the empirical literature is mixed on whether this relationship holds; meta-analyses suggest that the relationship is weak. One possible reason that the results are mixed is that social and environmental performance measures are heterogeneous.

While financial performance indicators have become standardized, social and environmental performance ratings have not. As the prominence of SRI grows, so does the number of metrics available to evaluate corporate social performance. Sadowski, Whitaker, and Buckingham (2010) inventoried 108 ratings, of which only 21 existed in 2000.

The complexity of environmental and social performance contributes to the proliferation of rating metrics. Such ratings are artificial constructs that can be interpreted and evaluated differently. Different aspects of environmental performance might be important to different rating schemes. For instance, one rating could place emphasis on greenhouse gas emissions, while another rating could focus on water usage. The heterogeneity of such ratings creates a

situation in which the results of assessment of environmental performance can differ based on which criteria are used.

The Data

MSCI ESG KLD STATS is a data set of annual positive and negative environmental, social, and governance (ESG) performance indicators. MSCI ESG Research collects information from company disclosures, academic datasets, government databases, NGO sources, media, and other stakeholders. The dataset contains indicators of positive and negative ESG performance. If the company meets the criteria, it is assigned "1"; if the company does not meet the criteria, it is assigned a "0"; if the company was not assessed for the particular indicator, it is not assigned a value. The KLD data set provides a lot of information: it has information on ten areas of environmental strengths and twelve areas of environmental concerns, as well as information on the total number of environmental strengths and concerns. KLD also has information regarding other areas of strengths and concerns that socially responsible investors might be interested in.

Another possible measure of environmental performance is the amounts of toxic chemicals released by the company, as provided by the [EPA's Toxics Release Inventory (TRI)](). The TRI program requires facilities in certain industries (such as mining, utilities, manufacturing, wholesalers, publishing, and hazardous waste) that employ at least ten full-time equivalents and manufacture, process, or use at least certain amounts of TRI-listed chemicals to report annual releases of toxic chemicals. The data presented in this case study is highly simplified, focusing on air releases and total releases of all chemicals.

The TRI covers over 650 chemicals of varying degrees of toxicity that can cause a variety of negative health impacts and it is difficult to assess the toxicity of various chemicals. The EPA developed [Risk-Screening Environmental Indicators (RSEI)]() to measure toxicity of various chemicals.

RSEI is a modelling tool that can help identify situations that may pose chronic health risks. It includes the amount of chemical released, the location of that release, the toxicity of the chemical, its fate and transport through the environment, the route and extent of human exposure, and the number of people affected. RSEI computes the health risk and can be used to analyze risk over time and across sectors and locations. However, it is not a formal risk assessment and cannot be used to draw individual conclusions about specific populations, locations, facilities, or individuals. In this exercise, we use it as an indication of toxicity.

It is worth pointing out some weaknesses of the TRI. Although the TRI currently covers over 650 chemicals, it does not cover all toxic chemicals used in the United States. Another issue is that the TRI does not cover all industries. Thus, the TRI cannot help with decisions

regarding firms that have many facilities not covered by the TRI. Lastly, unlike KLD data, TRI data are entirely self-reported and research has suggested that such self-reports are.

The Corporations

The corporations are: Avon Products, Inc.; Clorox Co.; Colgate-Palmolive Co.; Dow Chemical Co.; E. I. Du Pont de Nemours and Co.; and Pfizer, Inc.

Avon Products, Inc., manufactures and markets beauty and related products worldwide and is headquartered in New York, NY. Avon is perhaps best known for its direct-selling operations, with 6.4 million representatives selling its products globally.

The Clorox Company manufactures and markets consumer and professional products worldwide. The company operates in four segments: Cleaning, Household, Lifestyle, and International. It is headquartered in Oakland, CA. The Clorox Company has many brands, including Brita, Burts' Bees, Clorox, Glad, and Green Works.

Colgate-Palmolive Company, together with its subsidiaries, manufactures and markets consumer products worldwide. It operates in two segments: Oral, Personal and Home Care; and Pet Nutrition. It is based in New York, NY. Its brands include Ajax, Colgate, Palmolive, and Softsoap.

The Dow Chemical Company manufactures and supplies products that are used primarily as raw materials in the manufacture of customer products and services worldwide. Its headquarters are in Midland, MI. In 2014, Dow Chemical had more than 6,000 product families, manufactured at 201 sites in 35 countries across the globe.

E. I. du Pont de Nemours and Company operates as a science and technology based company worldwide. The company's Agriculture segment offers corn hybrid, soybean, canola, sunflower, sorghum, inoculants, seed products, wheat, rice, herbicides, fungicides, and insecticides. It is headquartered in Wilmington, DE. In 2014, it had $35 billion in net sales and returned $4 billion of capital to shareholders.

Pfizer Inc., a biopharmaceutical company, discovers, develops, manufactures, and sells healthcare products worldwide. It is headquartered in New York, NY.

Assignment Questions

What should Skyler do? She has gathered a **spreadsheet** that includes information about the social and environmental performance of these 6 firms from MSCI and the US EPA, as well as financial data from Compustat. The data is available for 3 consecutive years. Her supervisor has asked her to: (1) rank these firms in order to choose the top three firms to invest in and (2) write a memo describing and explaining her suggested rankings and criteria. She is considering if she should focus solely on environmental criteria or take a broader approach that includes social and governance criteria.